Field Reference Guide--Soil EC

Keep with EC System and refer to daily.

(Refer to Operating Instruction Manual for complete instructions)

STEP I. PRIOR TO MAPPING: PERFORM ROUTINE DAILY MAINTENANCE

1. Inspect unit for loose or missing bolts, other obvious problems

2. Do coulter-electrode blades rotate freely? Excessive side play or rotating problems indicates service needed.

3. Clear mud build-up from toolbar

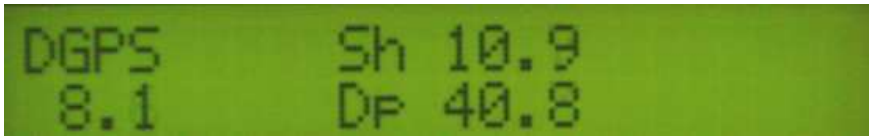
4. Install test load on EC Surveyor rear panel—port marked EC Signal. Turn power on. (For more information, see Maintenance and Service Procedure #1 in Operating Instruction Manual)

EC values should be:

<u>2000XA and 3100:</u>
Shallow 14
Deep 21

<u>MSP 3150:</u>
Shallow 11
Deep 40

Readings are acceptable if within 1 number from these.



5. Check electrical continuity from EC Surveyor to coulter-electrode blades, using Implement test box and ohmmeter. (For more information, see Maintenance and Service Procedure #2 in Operating Instruction Manual)

-Connect the signal extension cable to the test box.
-Touch one lead of an ohmmeter to the #1 coulter blade (left hand, standing behind the unit) and the other lead to the #1 terminal on the test box. A reading of less than 2 ohms is normal. Rotate blade ¼ turn as you check ohms.
-Continue to check each coulter electrode in succession, left to right.
-If any coulter electrode exhibits no continuity or resistance higher than 2 ohms, refer to the maintenance or trouble shooting sections for possible causes.

6. Check isolation on coulters—no metal part of any coulter may contact the implement frame or another coulter. (For more information, especially if EC values do not drop to –1 when implement is raised, see Maintenance and Service Procedure #3C in Operating Instruction Manual)

Connect one lead of an ohmmeter to each individual coulter electrode, and the other to a grounded fastener on the frame. Perform test on each coulter-electrode. Check ohms between all adjacent coulter-electrodes. If coulter electrodes are properly isolated, no readings will be obtained between coulters and frames or between adjacent coulters.